



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,701	03/29/2005	David R. Wardwell	20020019PCT-US	2061

Antony P Ng
Dillon & Yudell
8911 N Capital of Texas Hwy
Suite 2110
Austin, TX 78759

7590

07/30/2009

EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
----------	--------------

2452

MAIL DATE	DELIVERY MODE
-----------	---------------

07/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/529,701
Filing Date: March 29, 2005
Appellant(s): WARDWELL, DAVID R.

Anthony P. Ng
Reg. No. 43,427
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/27/09 appealing from the Office action mailed 3/18/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 6,957,281	Mann et al	10/18/2005
US 6,907,041	Turner et al	6/14/2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 5, and 9 are rejected under 35 U.S.C §103(a) as being unpatentable over Mann et al, U.S Patent NO. 6.957.281 ["Mann"].

2. As to claim 1, Mann discloses a method for collating data in a distributed computer network having non-synchronous compute nodes, said method comprising:

receiving a plurality of sets of data packets from a plurality of non-synchronous compute nodes physically separated from each other, wherein each of said set of data packets is provided by one of said non-synchronous compute nodes [Figure 1 «item 210»

Art Unit: 2452

| column 1 «lines 45-60» | column 4 «lines 52-60» where : Mann discloses receiving packets of different sessions at the controller, each session representing communications with a different network node | also see the Response to arguments above];

inserting said data packets into a software container according to user predetermined rules for determining a logical order for said data packets [column 3 «lines 6-9 and 41-48» | column 4 «lines 30-51» | column 5 «lines 18-28» where : Mann's queue is analogous to the claimed software container];

locating common groups of said data packets within said software container according to said user predetermined rules [column 3 «lines 41-48» where : Mann discloses grouping packets based on common session numbers];

protecting said software container against incomplete groups of said data packets due to system anomalies or quality of service within said distributed computer network according to a grouping criteria [column 5 «lines 18-28» | column 6 «lines 39-46» where : Mann discloses using sequence numbers to order the packets. Sequence numbers are well known in the art to help determine whether there are missing packets within the sequence of packets of a session]; and

outputting of said data packets in respective logical groups that represent an aggregate packet from said non-synchronous compute nodes after said grouping criteria has been met [column 3 «line 49» to column 4 «line 18» where : Mann's packet bundle is analogous to the claimed aggregate packet. The packets are grouped based on session numbers].

Art Unit: 2452

3. As to claims 5 and 9, they merely are directed towards an apparatus and computer program product on a medium, respectively, that implement the steps of the method of claim 1. Therefore, claims 5 and 9 are rejected for at least the same reasons set forth for claim 1.

4. Claims 2-4, 6-8, and 10-12 are rejected under 35 U.S.C §103(a) as being unpatentable over Mann, in view of Turner et al, U.S Patent No. 6,907,041 [“Turner”].

5. As to claim 2, Mann does disclose inserting data packets into said software container but does not expressly disclose performing said insertion according to individual packet time reference. In the same field of invention, Turner is directed towards a communications network for resequencing packets using a packet time reference, aka a timestamp [column 3 «lines 31-47»]. Turner expressly discloses inserting said data packets into a software container according to individual packet time reference [column 4 «line 65» to column 5 «line 7»].

It would have been obvious to one of ordinary skill in the art to incorporate timestamps into Mann’s insertion functionality. Use of timestamps enables the ability to better resequence packets into the correct order and to insure that they are transmitted in the correct order to the next destination in the network.

6. As to claim 3, Mann does disclose locating common groups of data packets within said software container, but does not disclose doing so based on individual packet time reference. Turner discloses locating common groups based on individual packet time

Art Unit: 2452

reference [column 4 «lines 56-59» | column 5 «lines 9-26» where : Turner's merging of different groups based on their time stamps is analogous to the claimed functionality].

It would have been obvious to one of ordinary skill in the art to have modified Mann to include the function of grouping packets based on packet time reference. Turner discloses that the ability to group based on time stamps benefits a system by enabling resequencing of a multiplicity of packets into a sorted order [column 4 «lines 56-59» | column 5 «lines 14-18»].

7. As to claim 4, Mann discloses outputting logical group of said data packets in respective logical groups that represent time-synchronous packets from said non-synchronous compute nodes after said grouping criteria has been met [column 4 «lines 1-17 and 52-60» | column 5 «lines 18-28» | column 6 «lines 39-46» where : Mann discloses outputting a bundle of packets based on the packet's session number and sequence number within that particular session. Mann's packets are therefore synchronous based on their sequence and session numbers].

8. As to claims 6 and 10, 7 and 11, and 8 and 12, they merely are directed towards an apparatus and computer program product on a medium, that implement the steps of the method of claims 2, 3, and 4 respectively. Therefore, claims 6 and 10, 7 and 11, and 8 and 12, are rejected for at least the same reasons set forth for claims 2, 3, and 4.

(10) Response to Argument

I. Mann's host system performs the receiving step in independent claims 1, 5, and 9.

Claim 1 recites a step of “receiving a plurality of sets of data packets from a plurality of a plurality of non-synchronous compute nodes physically separate from each other, wherein each of said sets of data packets is provided by one of said non-synchronous compute nodes.” Claims 5 and 9 recite a limitation with similar functionality.

Mann discloses that a host system, comprising a host and its I/O controller, where the controller comprises a packet receiver. (Fig. 2, 210). The packet receiver receives incoming packets and classifies them according to session numbers. (Col. 4, ll. 36-39 and 52-60). Mann further teaches that the host system may be part of a plurality of concurrent communication sessions with a plurality of network nodes. (Col. 1, ll. 45-62). Thus, based on the teaching that the host system receives packets from different sessions, it is obvious that the host system receives packets from a plurality of network nodes (each a different session) in the network.

Applicant argues that “[s]ince *Mann* discloses only one host system that is capable of receiving packets, *Mann* does not teach or suggest the claimed [receiving] step” because the step requires “a plurality of non-synchronous nodes.” In contrast to the examiner’s interpretation of Mann’s host system (detailed above), Applicant’s argument interprets Mann’s host system as the claimed non-synchronous nodes. Because this was not the interpretation set forth in the rejection, Applicant’s argument should not be found persuasive.

Applicant further argues that “the Examiner would want to characterize *Mann's* host system as the claimed software container.” This argument again fails to properly consider the Examiner’s position that Mann's host system is interpreted as the apparatus of claim 5 which performs the steps of method claim 1. Claim 5 is directed to an apparatus that comprises “means for inserting said data packets into a software container.” The rejection therefore characterizes Mann's host system as an apparatus that contains the claimed software container and not as the software container.

II. Mann’s host system performs the inserting step of independent claims 1, 5, and 9.

Claim 1 also recites “inserting said data packets into a software container according to user predetermined rules for determining a logical order for said data packets.” Claims 5 and 9 recite a similar limitation. In the specification, Applicant discloses a software container as a queue (MEQ) and provides one example of a user predetermined rule as sorting and grouping received packets based on different classifications of the packets. (Pg. 11, ll. 35-39).

Mann discloses that his packet receiver inserts received packets into a packet queue. (Col. 4, ll. 36-39). The packet queue may be implemented as a first in and first out (FIFO) mechanism (Col. 4, ll. 30-31). Mann also discloses that the queue “provides a space...for manipulating the received packets, including re-ordering the packets according to some classification criterion.” (Col. 4, ll. 44-48).

Further discussing this re-ordering feature, Mann teaches that the packets are classified and then re-arranged within the packet queue according to the classification (e.g., arranging all the packets within a same session number in a sequence). (Col. 5, ll.

Art Unit: 2452

18-25). The packets may be grouped based on the session classification and then further ordered based on the order they were received. (Col. 5, ll. 36-39).

Mann's teaching of inserting and ordering packets based on session number teaches the inserting step as claimed. Mann teaches that the packets may be grouped according to this classification. Based on the foregoing, Applicant's arguments should not be found persuasive.

III. With respect to claims 2, 6, and 10, Mann as modified by Turner disclose the claimed inserting step.

Claim 2 recites a step of "inserting further includes inserting said data packets into said software container according to individual packet time reference." Claims 6 and 10 recite a similar limitation. In the specification, Applicant states that packets "with the same time stamp are, logically adjacent to each other in the list." (Pg. 16, ll. 24-26). The examiner interprets the time stamp as the claimed packet time reference.

Similar to Applicant's disclosure, Turner discloses inserting and ordering received packets based on time stamps of the packets. (Col. 4, l. 65 to column 5, l. 4). In Turner's multi-stage system, each stage comprises a different buffer. A packet located in one stage is forwarded to the next stage and inserted in the next stage buffer in order of the time stamps. This teaching reads on Applicant's claim 2's inserting step.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 2452

Respectfully submitted,

/Dohm Chankong/

Primary Examiner, Art Unit 2452

Conferees:

/Kenny S Lin/

Primary Examiner, Art Unit 2452

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2451
